

# Innovative methods for measuring adoption of agricultural technologies

ESTABLISHING PROOF OF CONCEPT AND THINKING ABOUT SCALING UP

WORKSHOP OVERVIEW

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Independent  
Science and  
Partnership  
Council

**MICHIGAN STATE**  
UNIVERSITY



RESEARCH  
PROGRAM ON  
Policies,  
Institutions,  
and Markets

Led by IFPRI

# This workshop is not about...

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Assessment of:

Constraints to technology adoption;

Determinants of adoption; or

Benefits and impacts of adoption

These are important research questions, but are not the focus of this workshop

# Focus of this workshop is...

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Tracking and estimating adoption of agricultural technologies in developing countries as measured by:

- Area (hectares) – geographical scale
- Number of people (farmers, farm households, communities, 'end users,'...)

To understand (descending order of importance)

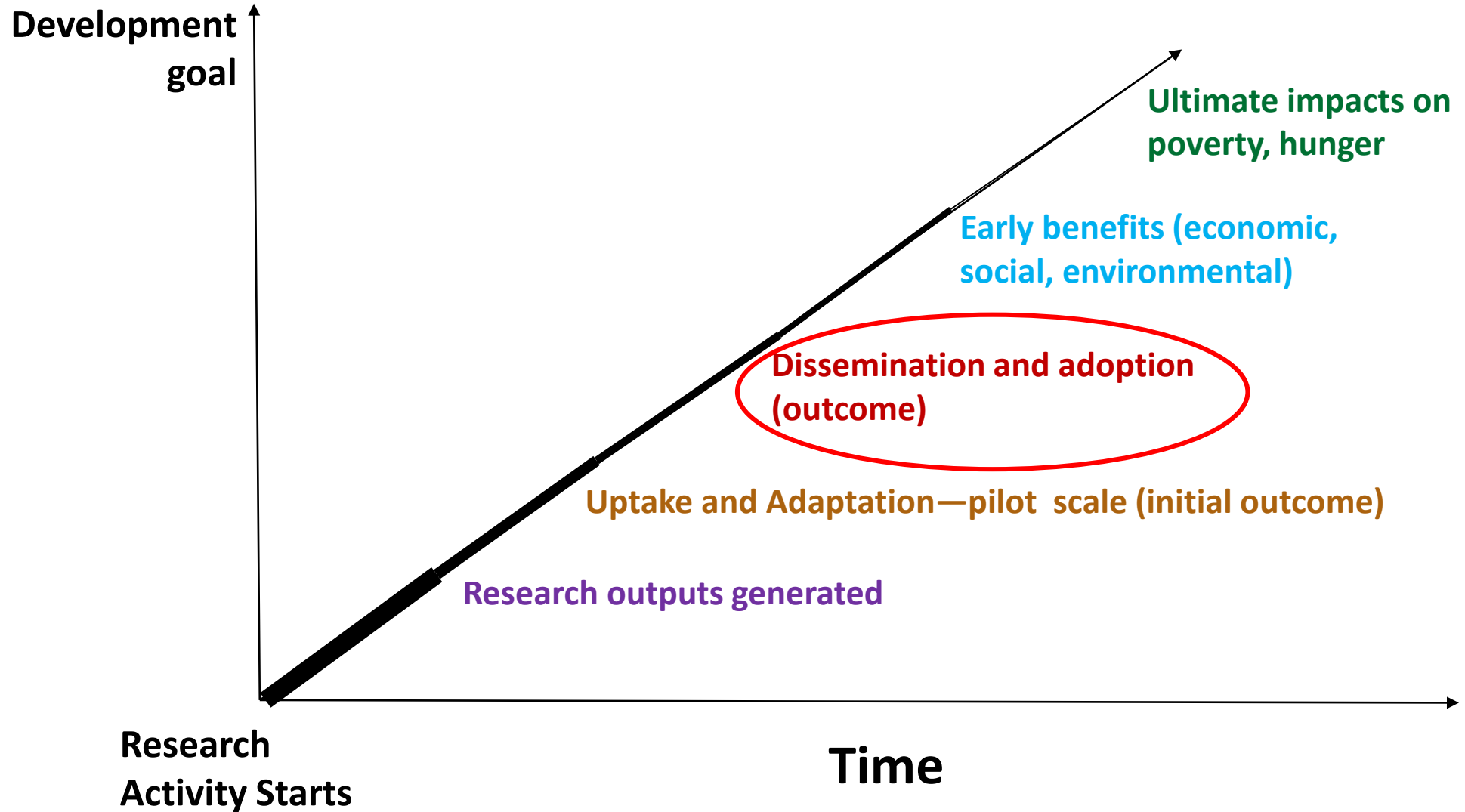
- The scale and magnitude of adoption (spatial dimension)
- Speed and rate of diffusion (temporal dimension)
- Patterns of adoption -- who is adopting (or not) and where adoption is occurring (social dimension)

# Tracking and estimating adoption of agricultural technologies in developing countries

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IMPORTANCE

# Research to Impact pathway



# Adoption – A necessary condition for achieving impact

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Two key parameters determine ‘impacts’ of research

- Adoption (the use and uptake of research outputs)
- Effect size (the benefit per unit of adoption of a research output in relation to an existing practice/technology)

Larger the values of these two parameters, larger will be the ‘impact.’

If no adoption → No impact

# Why measure adoption?

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It provides a simple measure of effectiveness and success of agricultural research

It provides a valuable source of feedback for research planning, esp. for publicly funded research

The resulting data can be used to:

- Guide subsequent research to uncover the development impacts of research
- Feed back into the research process to inform scientists and share further research
- Inform broader development community and shape thinking on a wider set of potential constraints to adoption

# Tracking and estimating adoption of agricultural technologies in developing countries

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## CHALLENGES

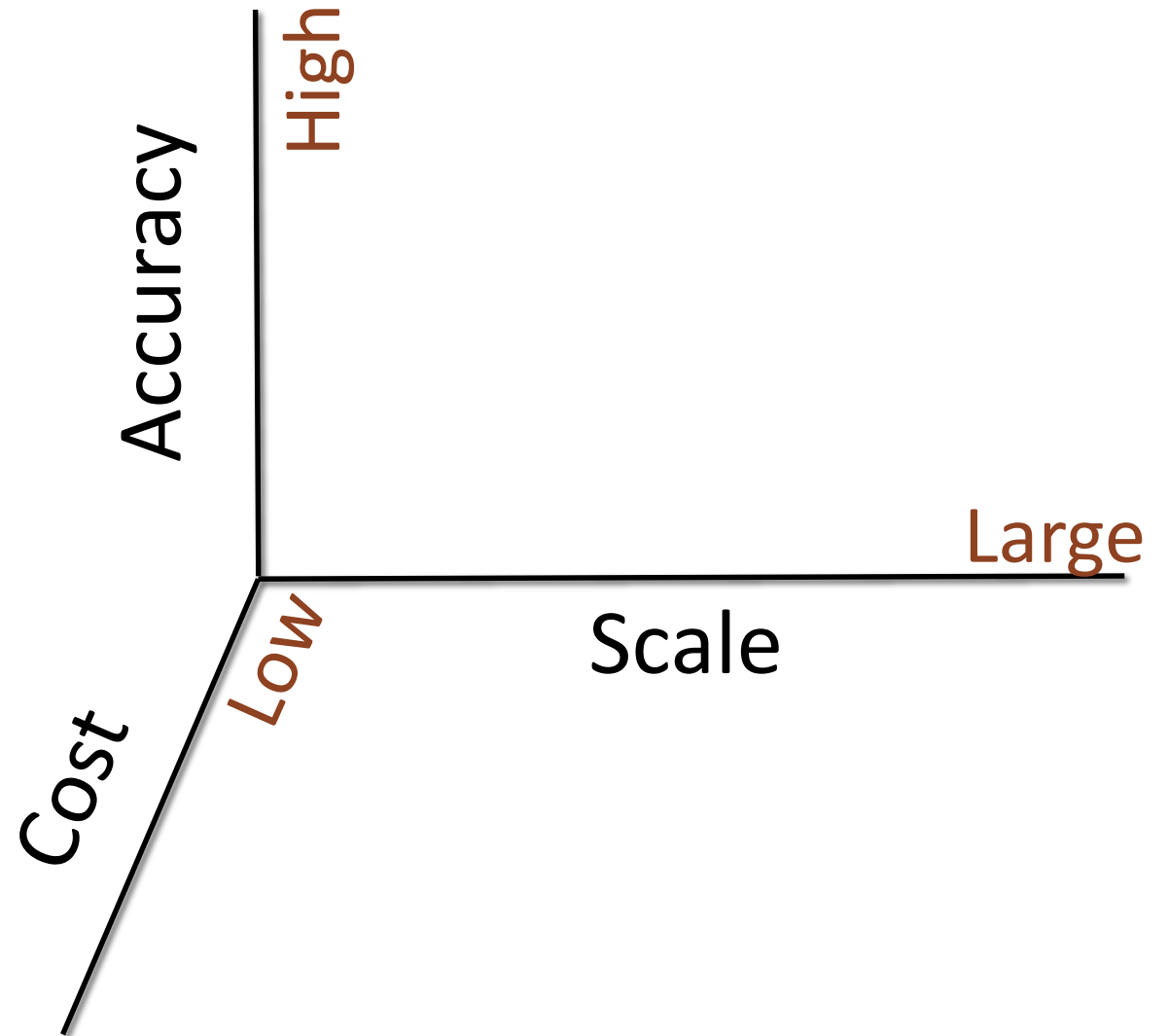


# 1. Methodology

- Cost effective ways to track diffusion and adoption of agricultural technology at a SCALE
- How to remain **Low-High-Large**

# 2. Frequency

Cost effective ways to track diffusion and adoption of agricultural technology more REGULARLY



# About this workshop...

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The importance of tracking technology adoption and the challenges of doing so provides the impetus for this workshop

Testing and exploring INNOVATIVE methods of tracking and measuring technology adoption has been an important objective of the SIAC project

These are issues that many NARS, CG centers, and CRPs like PIM are also grappling with

Collectively, these efforts have aimed for innovative methods to track technology adoption

# Innovativeness in terms of...

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Methods/approaches that are “Low-High-Large”

Finding low-cost alternatives to accessing or purchasing data for the purpose of tracking technology adoption at a scale

Institutionalizing data collection

- Data collection at a representative scale is already happening by public sector, and national statistical services in many countries
- Is there a way to institutionalize / integrate the collection of adoption data in these existing efforts for tracking and monitoring purpose?

The two day program is designed around these themes of  
'innovative methods and approaches'

# Objectives of this workshop

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1. Take a stock of current and innovative methods for measuring adoption of agricultural technologies
2. Share and discuss results and insights from pilot studies and experiments conducted to establish proof of concepts to harness the potential of new methods for tracking adoption of agricultural practices and other types of technologies
3. Further the discussion on scaling up proven methods for measuring technology adoption

# As we deliberate, let's focus on key themes of this workshop

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Innovative

Low-High-Large

Institutionalization

Low-cost alternatives